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# China Report

AGRICULTURE

No. 257

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16 May 1983

## CHINA REPORT

### AGRICULTURE

No. 257

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PRC PAPER CARRIES TALK ON RURAL ECONOMIC POLICY

HK140425 Beijing GUANGMING RIBAO in Chinese 3 Apr 83 p 3

[Article by Liao Jin [1675 6651]: "Also Talking About the New Changes in the Form of Distribution in the Rural Areas--a Discussion With Comrade Sun Qiyou"]

[Text] Comrade Sun Qiyou's article entitled "New Changes in the Present Form of Distribution in the Rural Areas," which was published in the special column of economics on 27 February, has approached some theoretical issues concerning the new changes in the form of distribution in rural areas since the contract responsibility system for agricultural production was adopted in our country, and particularly, all kinds of economic combinations appeared in the countryside. The article puts forward quite a few original viewpoints which are of immediate significance. But I feel that some viewpoints in this article are open to question.

The article regards the phenomenon of "more output, more gains," which has appeared in the form of distribution in rural areas since the responsibility system of contracting output quotas to households, and especially the all-round contract system, was generally adopted, as a reason for the change from the system of payment for labor to the system of returns sharing.

In order to trace the reasons for "more output," the article equates such non-Labor factors as the means of production and additional investment with labor, and on the basis of this, it comes to the conclusion that contractors' incomes not only derive from the payment for their labor but also from the "payment" for the means of production. I feel that this inference is not convincing.

First, the responsibility system of contracting output to households represents a reform of the manner of management, operation and labor organization on the basis of socialist public ownership. Its essence is the coexistence of scattered, independent labor and integrated labor. It provides a multi-leveled decision-making structure in production which combines "unity" with "independence." From the viewpoint of "unity," the collective ownership of land must be guaranteed; large farm machines and facilities should be used collectively; overall plans for selecting right crops and planting should also be made by collectives. From the viewpoint of "independence," it is necessary to rationalize the contracting of land to individuals and the scattered utilization of production tools within the collective economy. Various localities have

worked out different measures, which are suited to their specific conditions, for dividing land and utilizing production tools in a rationally scattered way. But the purpose of all these measures is to ensure the equal relationship between members inside the collective economy in the field of commonly owning the means of production. Otherwise, we are in no position to guarantee the socialist character of the cooperative economy in which the contract system has been adopted. Therefore, only the type of all-round contract system, which is carried out under the premise of equality in dividing the means of production, can be our base for studying the changes in relations of distribution.

Second, at the present level of productive forces in our country, no essential change in agrotechnology has yet occurred, and the input of capital in a unit area of land is limited. If the input exceeds a rational limit, output returns will decline or even no returns will be reaped. However, average peasant households are able to invest a reasonable amount of capital in their land. Even difficult households, with the help of the collective economy, are able to solve problems concerning investment and supplementary investment at a rational level. Therefore, disparities in this field between contractors will not be too large, and differential returns caused by this will be also very limited.

As of now, we may draw an initial conclusion that under the premise of dividing land and other means of production in a rational way, differential returns yielded by land are mainly caused by large-scale irrigation works, improved seeds and complex chemical fertilizers that are under the control of the collective. These factors are normally not allowed to be totally controlled or monopolized by individuals. Therefore, we should not attribute the major reasons for "increased output," that can bring about changes in contractors' incomes, to such factors as the means of production and pooled funds.

Of course, we cannot completely exclude the effect of material production conditions on the formation of differential returns. In particular, when changes in relations of distribution in rural areas are being analyzed in a deep-going way, non-labor factors cannot be ignored. However, this must be studied from the angle of the value formation of objects subject to distribution. Only thus can we clearly realize the respective positions and roles of the labor factor and non-labor factors, such as the means of production, in the changes in contractors' incomes. Marx's theory of the dual character of labor can help us understand this question: inanimate labor can only shift its own value gradually onto new products and it cannot become an element of the newly created value ( $V$  plus  $m$ ). Only abstract human animate labor can create new value, including the value of surplus products, in the course of production. Under the premise of guaranteeing equality in the utilization of land and capital, contractors must turn over to the state and the collective a fixed amount of their differential returns; while the other part of their differential returns, which may affect their incomes, varies according to the different quality of management. In an independent and scattered production manner, the differences in the quality of management are mainly reflected in the differences in the degrees of skill and complexity of labor. Under the developmental conditions of agrotechnology in our country, although additional investment within a rational limit may bring about differential returns, this is generally effected through the improvement of working conditions and thus



the enhancement of the complexity of labor. The surplus part of the value created by complex labor minus the value created by simple labor constitutes differential returns on the land. Various non-labor factors do not create any new value; nor can they directly give rise to differential returns. They can only function as intermediaries for enhancing the complexity of producers' labor. The only reason they also have a part in the distribution of returns lies precisely here.

Furthermore, when summarizing the current distribution manner in rural areas into a system of returns sharing, the article neglects a basic fact. That is, when distribution is handled under the output-quota contract system, neither the amount retained by the collective nor the amount gained by the individual contractor can be completely decided by the amount of returns. "More output, more gains" is not a new characteristic of distribution under the all-round contract system. "The higher the output produced, the more people can gain" is a common characteristic of distribution in the cooperative economy. Whether at the stage of elementary cooperatives in which distribution was according to both the amounts of work and land, or in advanced cooperatives and production teams of people's communes which implemented the work-point distribution system, the output of products produced by an economic unit was always the primary basis on which the unit value of a workday was determined. Under the all-round contract system, both the amount retained by the collective and the amount gained by the individual contractor have to be conditioned by the "standard output." When payment is being calculated, the "standard output" must be used as a uniform yardstick to measure various households' work. The amount of products left to the contractor, after those needing to be turned over to the state and to be retained by the collective are deducted according to the "standard output," should naturally be based on abstract labor which takes a form of concrete use-value. Therefore, distribution under the all-round contract system is precisely according to the amount of abstract labor provided by the contractor. "Distribution according to returns" is only an appearance and it cannot be thoroughly implemented.

Then, how should we approach the new changes in the present distribution manner in our country's rural areas? In my opinion, after the all-round contract system and various economic combinations appear, the new distribution manner will remain within the scope of payment according to work. Under the work-point system, the latent form of labor (that is, people's work ability) is the major yardstick for calculating payments; under various forms of fixed-quota management, the mobile form of labor is the yardstick; under the all-round contract system for distribution, the solidified form of animate labor, which is actually put into production, functions as a yardstick for calculating payments. Under these conditions the actual amount of labor, the degree of labor's complexity and the effectiveness of labor are completely reflected in the amount of final products which possess some specific use-value.

When analyzing this labor amount, we must pay attention to its dual character. The individual labor each contractor makes in production must first be recognized through the "standard output" inside the economic unit he belongs to.

At the same time, the concrete products that the contractor receives as payment for his work must be subjected to exchange through circulation channels, and thus the amount of labor must also be linked to the necessary work time of society. Only through this linkage can a contractor's individual labor be recognized by society.

CSO: 4007/134

STATE COUNCIL TO ISSUE RURAL ECONOMIC LAWS

OW081331 Beijing XINHUA in English 0713 GMT 7 Apr 83

[Text] Beijing, 7 Apr (XINHUA)--China will soon issue eleven laws or regulations on rural economic development, according to the economic legislation research center of the State Council.

Provisions will allow individual peasants to run industrial and commercial enterprises, to sell their surplus farm produce outside the localities, and permit commune-run enterprises to invite help from urban scientific and technical personnel in their spare time.

These new regulations will allow peasants to process and sell their farm produce so as to increase their income. The regulations include provisions allowing peasants to buy tractors and trucks, to conduct long-distance transportation for sale, and provisions on rural taxes and rural insurance.

Gu Ming, leader of the center, said that some rules or regulations governing the rural economy practised in the past were out of step of the new situation in the countryside, such as the limitation on individuals to buy big means of production including tractors and trucks. In the first eleven months of last year, in fact, the Shanghai tractor plant sold 727 tractors to individual peasants from 20 provinces and autonomous regions. During the one and a half months around the last spring festival, the Nanjing motor vehicle plant sold 346 3-ton trucks to individual peasants.

In Hebei Province, more than 6,000 scientists and technicians signed nearly 4,300 technical contracts last year that brought a substantial increase in the output of grain, cotton and oil-bearing crops on 200,000 hectares. This year, 5,500 agro-scientists and technicians in the province have signed technical contracts covering 2 million hectares of farmland, or one third of the province's total.

CSO: 4007/134

'EXCELLENT' SITUATION IN SPRING FARMING EXISTS

OW171133 Beijing XINHUA Domestic Service in Chinese 1516 GMT 15 Apr 83

[By reporter Feng Dongshu]

[Excerpts] Beijing, 15 Apr (XINHUA)--The busy spring farming season has successively begun throughout China.

Information given to this reporter by the departments concerned under the Ministry of Agriculture, Animal Husbandry and Fishery shows that the situation of this year's spring farming in China is excellent. The good situation is primarily shown by the following indicators:

--The vast countryside is a scene of unprecedented spring farming activities by peasant families. This year's spring grain area is about 10 million mu larger than last year's.

--A large number of specialized farming households, households doing specialized jobs and model households with scientific or technological achievements have emerged.

--The nationwide bumper agricultural harvest in 1982 left the peasants with sufficient food grain, seeds and fodders and enabled them to have more funds and draught animals. The number of draught animals has increased by several million as compared with 1981.

--The state plans to supply 15 percent more chemical fertilizers, 31 percent more plastic sheeting and 3.4 percent more insecticides this year than last year. The supply of diesel oil to the countryside has begun to increase. All this has created better conditions for this year's agricultural production.

--Various localities have trained a large number of technicians and are offering good technical services.

--Spring rains came earlier and at a proper time in the northern part of China this year.

Comrades from the departments concerned under the Ministry of Agriculture, Animal Husbandry and Fishery do not think that the good situation at the beginning of spring farming guarantees good harvests. They urge people to do a good job henceforth in preparing against and combating various natural disasters in order to reap bumper harvests.

# GRAIN-SCARCE PREFECTURES BECOME MAJOR SUPPLIERS

OW191225 Beijing XINHUA in English 0942 GMT 19 Apr 83

[Text] Nanjing, 19 Apr (XINHUA)--Eight prefectures in East and Central China doubled their grain supplies to the state in 1982 compared with 1978, following successive years of good harvests, according to a national conference on grain production in Xuzhou, Jiangsu Province.

The eight prefectures, all formerly poor areas, have become major surplus grain centers, selling 5.2 million tons of grain to the state in 1982. They are Huaiyin and Xuzhou in Jiangsu Province, Chuxian, Fuyang and Chaohu in Anhui Province, Nanyang and Zhoukou in Henan Province and Ji'an in Jiangxi Province.

The eight prefectures have a total of 5.6 million hectares of farmland and a population of 56 million. Most had to depend on grain supplied by the state to make up for their deficiency in the past, the conference was told.

One of the most outstanding examples is Xuzhou Prefecture, covering eight counties in the lower reaches of the Huai River. Its total grain output, hovering around one million tons in the fifties and sixties, rose to 2.2 million tons in 1977, rising at an average annual rate of 3.4 percent between liberation in 1949 and 1977.

In the five years between 1978 to 1982, however, grain output in Xuzhou shot up at an average annual rate of 11.6 percent to 3.86 million tons in 1982. Cotton output nearly doubled in the five years and output of oil-bearing seeds nearly trebled. The peasants, who formerly subsisted on sweet potatoes now have rice and wheat as their main diet, and sweet potatoes are used for liquor or fodder.

In nearby Huaiyin Prefecture, 148,000 peasant families--8.7 percent of the peasant families in the prefecture--produced more than five tons of grain each, representing a fairly high level in the country.

In Anhui Province, where three formerly poor prefectures have become surplus grain producers, the peasant have delivered a total of five million tons of grain to the state following the 1982 harvest, over 1.2 million tons of which have been sent to other parts of the country. In the more than one decade

before 1978, the province sent no more than 300,000 tons of grain to other areas every year.

A leader of the Anhui Provincial food department said that in order to increase the amount of grain, stores with a total capacity of over 1.5 million tons have been built in the province in the last three years, more than the combined capacity added in the preceding 15 years.

Fengyang County - Chuxian Prefecture of Anhui Province, which had been a net grain consumer for over 20 years, supplied 125,000 tons of staple grain last year to the state food store, with a per capita average of 256 kilograms.

CSO: 4020/70

'CHINA DAILY' ON PREFECTURAL GRAIN SUPPLY

HK160646 Beijing CHINA DAILY in English 16 Apr 83 p 3

[Text] Grain supplies given to the State have been doubled by eight prefectures following a successful change in agricultural production.

The prefectures or cities in the grain-rich central provinces of Jiangsu, Anhui, Henan and Jiangxi, supplied 5.2 million tonnes of staple grain to the state in 1982, an increase of 100 percent in three years, according to the all-China Grain Production Conference now being held in Xuzhou, Jiangsu Province.

The eight prefectures (cities) are Huaiyin and Xuzhou of Jiangsu Province; Chuxian, Fuyang and Chaohu of Anhui Province; Nanyang and Zhoukou of Henan Province and Jian of Jiangxi Province. Each rural resident in the eight prefectures sold an average 100 kilogrammes of grain to the State last year.

The highest sales record was registered in Huaiyin city, which sold 1.2 million tonnes of grain to the State last year, with a per capita sales average of nearly 150 kilogrammes.

The most remarkable change in grain production was shown in Anhui and Jiangsu provinces, where two counties formerly depending on grain subsidy from the State have now been transformed into top grain suppliers in the country. Fengyang County in Chuxian Prefecture of Anhui Province, which had been a net grain consumer for over 20 years, supplied 125,000 tonnes of staple grain last year to the State food store, with a per capita average of 256 kilogrammes.

Equally notable is Yutai County in Huaiyin Prefecture of Jiangsu Province, which, also low in grain output for many years, sold over 120,000 tonnes of grain to the State in 1982, overfulfilling its scheduled target tenfold.

These eight prefectures have undergone a series of changes in their agricultural production, including widespread use of quality seed strains and readjustment of crop layout. But the most essential factor, which accounted for the unprecedented enthusiasm of the rural producers, was attributable to the various forms of job responsibility systems applied in the past few years.

The eight prefectures have been named now as the bases of staple grain production, according to the conference.

Also in Jiangsu Province, a state farm has been developed into a quality seed strain production base under the management of China Seed Strain Corporation, the Economic Information reports.

CSO: 4020/70



# CHINA IMPROVES MARKETING OF OFFCUT LUMBER

OW140616 Beijing XINHUA Domestic Service in Chinese 0845 GMT 11 Apr 83

[By reporter Zhou Yichang]

[Excerpts] Beijing, 11 Apr (XINHUA)--From the symposium of managers of companies in the marketing areas for forest products held yesterday, this reporter has learned that, since the forestry departments have improved the circulation of lumber not included in the unified state purchase plan and adopted measures to directly link producers with consumers, a large amount of such lumber is being transported to various localities where it can be marketed, thus greatly alleviating the situation characterized by the saying that "lumber rots away in the mountains, while people badly need it at home." Such measures have supported production and construction in cities and in the countryside, and invigorated the economy in forest areas. According to compiled statistics, in lumber marketing areas, such as Henan and Shandong, about 100,000 cubic meters of lumber not included in the unified state purchase plan and 40,000 cubic meters of small tree branches were transported to marketing areas between December 1982 and March this year.

In November 1982, the Ministry of Forestry decided to improve the circulation of lumber, not included in the unified state purchase plan, and organized the lumber producing areas to directly contact the marketing areas, and put the production and marketing of this kind of lumber on the correct path. It also held a meeting in Jinan of representatives from 18 provinces, municipalities and autonomous regions for the production and marketing of lumber not included in the unified state purchase plan. At the meeting, it closely linked lumber producing Heilongjiang, Jilin, Nei Mongol, Fujian and Jiangxi with the lumber marketing areas, such as Shandong and Hebei.

In 1982, the Ministry of Forestry helped forest areas sell lumber not included in the unified state purchasing plan, so that the forest areas increased their revenues by 350 million yuan. Thus, state and collectively run enterprises in the field of forestry have ample funds to organize young people waiting for jobs in the forest region to grow a large number of saplings, to develop diversified utilization of lumber not included in the unified state purchase plan and to promote commodity production in forest regions in order to achieve the goal of growing more trees by selling forest products.

The Ministry of Forestry also helped commercial and other departments to order, from the forest region, more than 400 types of wood and semi-finished products, totaling 17 million pieces. These products, made of lumber not included in the unified state purchase plan, were used to expand the sources of goods on the market.

PRC MAKES PROGRESS IN FOOD IRRADIATION

OW201128 Beijing XINHUA in English 1103 GMT 20 Apr 83

[Text] Beijing, 20 Apr (XINHUA)--China's research in food irradiation is moving out of laboratory and into large-scaled application, according to the Ministry of Public health.

Since 1981, the state has approved seven categories of food to be treated by irradiation with isotopes and low-energy accelerators. They are potato, onion, garlic, fresh pork, grain, mushroom and chestnut. Standards have been set for some of the treated food, the ministry said.

Experimental centers and intermediate production bases have been or are being established in Beijing, Shanghai, Guangzhou and other places. It is expected that these bases will provide several kinds of irradiated food for the home and international markets in the next few years.

Irradiation treatment is a modern method for storing food to prevent deterioration and destruction by worms.

China began food irradiation research in 1958. Research institutions and colleges across the country have produced satisfactory results in experiments with a variety of food.

A grain storage research unit in Sichuan has worked out the doses of irradiation needed to kill corn weevils, saw-toothed grain beetles, broad bean weevils and other grain eating worms. The grain thus treated can be kept for three years in ordinary granary.

Potatoes, onions and garlic treated by isotope irradiation in Henan Province can be kept for seven or eight months without any loss of water content or nutrients.

CSO: 4020/70

AGRICULTURAL JOURNALS, PAPERS PROSPER

OW081349 Beijing XINHUA in English 1319 GMT 8 Apr 83

[Text] Beijing, 8 Apr (XINHUA)--China has 482 agricultural newspapers and journals aimed at bringing news and views to the country's 800 million peasants, according to the information section of the Ministry of Agriculture, Animal Husbandry and Fishery.

The biggest national agricultural newspaper, the CHINA PEASANT NEWS, is a four-page newspaper published three times a week. It has a circulation of nearly one million. But the most popular papers are the tabloids devoted to agrosience. There are about 400 of them. The HUNAN SCIENTIFIC AND TECHNICAL NEWS has nearly one million subscribers in Hunan Province alone. The circulation of the paper has shot up to 1.3 million. It was 400,000 in 1982.

Most of the newspapers and journals were launched after 1979 when the agricultural responsibility system was instituted in the rural areas. County newspapers number 400. In Huarong County, Hunan Province, the paper SCIENTIFIC FARMING has a circulation of 69,000, or two for every three households.

Fang Gan, head of the Information Section of the Ministry of Agriculture, Animal Husbandry and Fishery, said that newspapers and magazines are the most effective means of bringing knowledge of science and agricultural techniques to the vast countryside. "We are making more science films and broadcasting more agrosience programs on radio and TV in order to promote scientific farming," he said.

Danyang County, Jiangsu Province reported that local peasants learned about hybrid rice cultivation techniques from an article published in the Shanghai-based SCIENTIFIC FARMING. In 1981, the county planted 24,660 hectares of hybrid rice and the total yield was 23,000 tons more than in 1979.

CSO: 4020/70

ANHUI

PEASANTS INVITE YANG JIKE TO CHAIR ASSOCIATION

OW1'0107 Beijing XINHUA in English 0210 GMT 10 Apr 83

[Text] Hefei, 10 Apr (XINHUA)--A peasant specialized household association in Guzhen County, Anhui Province, has invited Professor Yang Jike, vice-governor of the province to be their honorary chairman.

The vice-governor, a professor of biology at the China University of Science and Technology, is now in charge of the province's science and education.

He wants to give full backing to the 18,000 households engaging in various specialized production in the county. He brought with him a group of scholars and experts to Guzhen County for passing on agrosience to the specialized households, which comprise 21 percent of the total number of peasant households.

CSO: 4020/70

## XIANG NAN INSPECTS SOIL EROSION

OW201058 Fuzhou Fujian Provincial Service in Mandarin 1120 GMT 17 Apr 83

[Text] During a recent inspection tour in western Fujian Comrade Xiang Nan, first secretary of the provincial party committee, pointed out that while responsibility systems have been adopted in agricultural and forestry production, a responsibility system should also be adopted to control soil erosion. He had hoped that the woodlands could be preserved and further soil erosion prevented by a responsibility system.

On 1 April, Comrade Xiang Nan and Wen Xiushan, standing committee member and chairman of the agricultural committee of the provincial party committee, and Zhang Yumin, standing committee member and secretary general of the provincial party committee, visited (Hetian) commune in Changting County. Making an on-the-spot observation from a sandy hill in the commune, they saw that, owing to the protracted destruction of the woodlands, soil erosion there is serious; but they also saw that, thanks to professor (Li Lailong's) guidance, the local people have found an effective way of harnessing soil erosion by planting sponge trees and (?Chinese scholartrees) during the past several years.

The next evening, Comrade Xiang Nan called a meeting attended by leading comrades and experts of departments concerned and some people's representatives to discuss how to harness soil erosion. It was decided at that meeting that the hilly areas would be contracted to the peasants for planting sponge trees and other trees that prevent soil erosion, and that each of the following eight units--the provincial forestry, water conservancy and agricultural departments, the forestry college, the institute of forestry sciences, the provincial water conservancy office, the Longyuan Prefectural Administrative Office and the Changting County Government--would be charged with the responsibility of leading three brigades for a period of 3 years to study how to control soil erosion effectively. The meeting also decided that the most effective ways would be popularized throughout the province.

Comrade Xiang Nan also had the hope that (Hetian) commune would work hard to achieve remarkable results so as to set an example for the rest of the provinces.

CSO: 4007/134

## GUANGDONG

### BRIEFS

GUANGDONG RURAL ENTERPRISES--Up to now, 60 percent of commune and brigade enterprises in Guangdong have instituted various forms of the contracted responsibility system. Last year, the total income of these enterprises reached 6.2 billion yuan, a rise of 17 percent compared with 1981. The enterprises paid 700 million yuan in tax to the state, a rise of 30 percent. Average worker income was 690 yuan, an increase of 14 percent. [HK160718 Guangzhou Guangdong Provincial Service in Mandarin 2350 GMT 11 Apr 83]

CSO: 4007/134

ALL AROUND INCREASES IN AGRICULTURAL PRODUCTION POSTED

Shijiazhuang HEBEI RIBAO in Chinese 7 Mar 83 p 2

[Article: "Province Shows All Around Increases in Agricultural, Livestock, Sideline Occupation and Fishing Industry Production. Gross Output Value of Agriculture Forecast at 12.6 Percent More Than 1981. Average Per Capita Income Increases 16.8 Percent"]

[Text] The Provincial Statistical Bureau has announced an all around increase during 1982 in Hebei Province's agricultural, forestry, sideline occupation, and fishing industry outputs. All major production targets set in the state plan were fulfilled or overfulfilled.

The gross output value of agriculture is forecast at 1.33 billion yuan (figured at 1980 constant prices), which is an increase of about 12.6 percent over 1981.

Grain output totaled 35.037 billion jin, 3.537 billion jin more than in 1981, an 11.2 percent increase. This included an autumn grain increase of 2.955 billion jin, or 12.8 percent for another all time high autumn grain production record.

Cotton output totaled 771 million jin, 328 million jin or 74 percent more than in 1981, and 125 million jin or 19.3 percent more than the province's all time high output of 1955.

Output of oil-bearing crops totaled 1.076 billion jin, 147 million jin more than in 1981, a 15.8 percent increase, and the third all-time high in as many years.

During 1982, 2,986,000 mu was afforested. This was 770,000 mu more than in 1981, a 35.2 percent increase.

Dry fruit [nuts, tree fungus, lily buds etc] output stood at 57,230,000 million jin, 1.99 million jin more than in 1981, a 3.6 percent increase.

Large livestock animal output was 3,463,000 head, 166,100 head

more than in 1981, a 5 percent increase.

Hogs in inventory totaled 12.27, 100,000 or 0.9 percent more than in 1981. The 7.56 million hogs removed from inventory represented a 1.6 percent increase over 1981.

Sheep and goats in inventory numbered 9.15 million, 726,400 or 8.6 percent more than in 1981. The number removed from inventory was 2,693,000, or 10.2 percent more than in 1981.

Output of aquatic products totaled 97,870 tons, 17,700 tons more than in 1981 for a 22.1 increase.

Gross output value of brigade operated industries was 1.87 billion yuan, 21 million yuan or 1.2 percent more than in 1981.

Peasant per capita earnings are estimated at an average 238.70 yuan, 16.8 percent more than in 1981.

9432

CSO:4007/103



# TECHNICAL CONTRACTING WITH PEASANT HOUSEHOLDS INCREASED

Shijiazhuang HEBEI RIBAO in Chinese 9 Mar 83 p 1

[Article: "Agriculture Departments at All Levels in Province Transfer Two-Thirds of Technicians. One-Third of All Farmlands Contracted"]

[Text] Right after the lunar new year, agricultural departments at all levels in Hebei Province transferred two-thirds of their technical cadres plus technical personnel semi-relieved from farm work, a total of more than 15,000 people, to rural villages to undertake technical contracting linked to output. The contracted area already amounts to one-third the province's total cultivated area.

From a basis of general rural institution of contract responsibility systems linked to output in Hebei Province, last year agricultural departments at all levels of the province transferred 5,200 technicians to the countryside where they signed more than 6,000 technical contracts linked to output with production units. The contracts covered a 2.9 million mu area. Incomplete statistics show increased yields having resulted from more than 3,700 of the 6,000 technical contracts. Grain output increased by 51 million jin, ginned cotton by 15 million jin, and oil-bearing crop output by 810,000 jin. Awards to technicians totaled 540,000 jin. Both the Provincial CPC Committee and the provincial government fully affirmed the responsibility, authority, and benefits of this group of technicians and the new achievements they had wrought in agricultural production. They also held a special conference early this year, which summarized experiences, issued awards to the advanced, and studied and formulated development plans for 1983. The broad masses of farm technicians feel leaders are behind them and that they have room to apply their skills. They vie with each other in seeking assignments to the countryside. The province's cultivated land area under technical contract linked to output currently stands at 30 million mu.

The wholesale movement to the countryside of technical cadres and

technicians to contract "technical responsibility fields" has resulted in a shift of focus in the spread of agricultural techniques. Where formerly brigades had been the focus, now scientific techniques are carried directly into countless households, where they are welcomed by the peasants. This has given impetus to the implementation of this year's production plans, and the promotion of farming techniques.

9432

CSO:4007/103

# RAT ERADICATION EFFORTS REPORTED

Beijing ZHONGGUO NONGMIN BAO in Chinese 1 Mar 83 p 2

[Article: "Hebei Province Institutes Rat Eradication Responsibility System. Province's Rat Population Drops 16.7 Percent in Past Year"]

[Text] Hebei Province has roused the masses on a broad front to take effective actions of various kinds in a mammoth campaign to eradicate rats. Incomplete statistics show a total of 36.4 million rats as having been eradicated last year for a 65.48 million jin reduction in grain losses and a 100 million yuan economic gain. Surveys of key points in various environments show a 16.7 percent drop since last year in the rat pest population. In Zhangjiakou Prefecture, rat pests have virtually been brought under control.

By way of arousing mass enthusiasm for rat eradication, and in order to increase effectiveness in rat eradication, Hebei Province has instituted a rat eradication responsibility system. For example, in accordance with the principle of "those who benefit should be the ones to eradicate rats," Zhangjiakou has instituted a "six fixed" responsibility system that provides for rewards and penalties. This system has fixed personnel, fixed fields, fixed times, fixed quotas, fixed remuneration, and inspections at fixed times, rewards and punishments being handed out on this basis. The specific way the system works is as follows: The task of eradicating rats in grass on land contracted to commune members for farming is assigned to persons in households at the time households contract full responsibility for task completion. For grassy areas and uncultivated land outside production teams, special rat eradication teams are organized. Sixteen commune farm science stations in 21 communes, and county plant protection stations signed contracts for the eradication of rats on 59,000 mu. These contracts set forth prevention and control tasks, prevention and control results, prevention and control methods, amounts of pesticide to be used, time pesticides were to be used, and conditions for issuance of rewards and penalties. This effectively increased prevention and control results. According to a survey of 23 production brigades in Zhangjitun Commune, Huaian County, 93.7 percent of all rats had been eradicated on 3,600 mu on which rat extermination had been contracted.

9432

CSO: 4007/104

HEBEI

DEVELOPMENTAL AGRICULTURAL RESEARCH ACHIEVEMENTS NOTED

Shijiazhuang HEBEI RIBAO in Chinese 7 Mar 83 p 2

[Article: "Langfang Prefecture Succeeds Remarkably in Agricultural Developmental Research"]

[Text] The nine developmental agricultural research projects that Langfang Prefecture undertook last year netted economic benefits from technology totaling more than 2.6 million yuan. Research results for three of the developmental projects in agriculture won the province's 1982 award for scientific and technical achievements. Research on scientific techniques for fertilizing wheat with phosphate covered a test area of 194,900 mu and involved 23 communes in eight counties. In the test area, yields averaged 271.4 jin per mu, 84.3 jin per mu more than in control fields, a 45.1 percent increase. Research on development of high yield cotton farming techniques conducted in Anci and Daguang counties covered a 9,100 mu test area and produced yields averaging 102 jin per mu, 27 jin per mu more than control fields for 387,000 yuan in economic benefits from technology. Developmental research on high yield corn farming techniques carried out in Sanhe County, developmental research on the farming of small peas in Guan County, the introduction of pepper to cultivation in Wenan County, high peanut yields in Yongqing County, and developmental research on techniques for intercropping corn and soybeans in which the prefecture's agricultural bureau took the lead have all brought rather satisfactory results.

9432

CSO:4007/103

## HEILONGJIANG

### BRIEFS

HEILONGJIANG WHEAT SOWING ACHIEVEMENTS--According to statistics compiled on 7 April, Heilongjiang Province has sowed over 11 million mu of wheat. Wheat cultivation areas in southern and middle Heilongjiang have basically completed their sowing operations. There are 26 counties and 18 state farms across the province, which have successfully fulfilled their wheat sowing plans. [SK170807 Harbin Heilongjiang Provincial Service in Mandarin 1100 GMT 12 Apr 83]

CSO: 4007/134

## BRIEFS

HENAN DROUGHT--Anyang Prefecture in Henan Province planted 7.3 million mu of wheat this year, the highest amount ever. Since it has neither rained nor snowed for four months since the onset of winter, drought is serious. Many fields lack water, lack fertilizer, have yellow leaves, and are extremely dry. The Prefecture CPC Committee and government administrative offices have called upon the entire prefecture to resolutely overcome their paralyzed thinking and ill-advised optimism, to brace themselves to fight drought to win a bumper harvest, to put spring irrigation plans into effect quickly, to tighten up management of petroleum fuels and electricity, to practice thrift, and to halt waste. They have proposed issuance of coupons for supply of petroleum fuels, setting a certain number of mu to be irrigated with a certain amount of fuel, and issuing the coupons to production team watering teams for centralized use. All trades and industries are to cut back on the use of fuel and electricity to fight drought. The petroleum, electric industry, supply and marketing, and farm machinery sectors should treat support to the fight against drought as a key matter. Leaders at all levels are to go into the frontline of the fight against drought, solve concrete problems at once, and do a good job of unified allocation and supply of materials needed to fight drought. Currently more than 76,000 pump wells and more than 58,000 diesel engines are in operation throughout the prefecture in fighting drought, and more than 1,000 irrigation ditches have been refurbished. [Text] [Beijing ZHONGGUO NONGMIN BAO in Chinese 1 Mar 83 p 2] 9432

CSO: 4007/104

## BRIEFS

RURAL PROSPERITY WEEKLY--Nanjing, 7 Apr (XINHUA)--A weekly newspaper telling peasants how to achieve prosperity will begin official publication 1 May in Nanjing, capital of Jiangsu Province. A trial edition of ZHI FU BAO was published yesterday. ZHI FU BAO, meaning literally "achieve prosperity paper," will explain to rural cadres and peasants the party's rural policies while providing knowledge on crop cultivation, animal raising and processing of rural produce, said a spokesman for the paper in a telephone interview with XINHUA today. The Octavo paper will be published by the XINHUA DAILY, an organ of the Jiangsu Provincial Committee of the Chinese Communist Party, and the Jiangsu Provincial Supply and Marketing Cooperative, and sell for 2 fen (about 1 U.S. cent) per copy. It will be sold first in Jiangsu Province and eventually be circulated throughout China. [Text] [Beijing XINHUA in English 1513 GMT 7 Apr 83 OW]

CSO: 4020/70

## BRIEFS

GRAIN PRODUCTION INVESTMENT--Dehui county, Jilin Province, which has taken up the pilot work of building marketable grain bases, has scored marked achievements in accelerating progress in building grain bases through high investment in order to achieve good results. According to statistics, the county's investment in agriculture this year surpasses the 1982 figure by 11 percent. As a result, the county has been able to introduce a large amount of fine seeds from other provinces. The volume of per-mu applies fertilizer surpasses that of 1982 by 50 percent. The paddy field acreage has increased from 176,000 mu in 1982 to 220,000 mu in 1983. As of now, the county has produced over 2,000 peasant technicians. [Changchun Jilin Provincial Service in Mandarin 1030 GMT 10 Apr 83 SK]

CSO: 4007/134



## COMMENTARY ON RURAL CONTRACT SYSTEM

SK201216 Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 19 Apr 83

[Station Commentary: "Correct Unhealthy Trends to Ensure the Implementation of Contracts"]

[Text] Recently, a commune member of (Shangfeili) commune in Kaiyuan County wrote to this station saying that last year he signed a 5-year contract with a brigade to develop an orchard. However, after implementing the contract for just 1 year, authorities concerned of the brigade declared the contract invalid. With the help of prefectural, county and commune departments concerned, the contract disagreement was reasonably resolved.

This station has received many letters of this kind. From these letters we can see that ensuring the implementation and fulfillment of contracts has currently become a tendentious problem urgently in need of solution.

As we all know, the contract system is an inevitable outcome of the output related contract responsibility system and is an important factor for consolidating and improving such a system. Hosts of facts have shown that, thanks to the implementation of the output related contract responsibility system, most poverty-stricken production teams have become better-off, fairly rich teams have made big strides forward towards prosperity and rich teams have become more prosperous. Therefore, we must have contracts to guarantee the implementation of this system. It is thus clear that the contract system has vigorously and specifically reflected the party policies aimed at making all people prosperous. Peasants, of course, do not want policies to further perfect perfection. Certainly, they do not welcome such a reckless attitude as breaking contracts already signed. Therefore, if none of our economic departments pay attention to the will and desire of the peasants and to democracy in the economic sphere and arbitrarily revise or tear up contracts, they will surely cause ideological confusion among the peasants, and will affect the consolidation and perfection of the production responsibility systems and the implementation of the party's rural policies. Such a way of doing things is unacceptable.

We should notice that all contracts are protocols guaranteeing the interests of the state and the collective as well as ensuring actual benefits for the individuals. The collective has the responsibility of providing all necessary

funds, technology and materials for the peasant households, and peasant households have the obligations to sell necessary farm and sideline produce to the state and to hand in public accumulation funds to the collectives in line with the stipulations in the contracts. Therefore, the contract system also correctly reflects the relations between the interests of the state, the collective and the individual. We must not think that some units and departments, regarding contracts as a guarantee of peasants' obligations, will mobilize the enthusiasm of the peasants, promote production and bring benefits to the state and the collective. To the contrary, it will dampen the peasants' enthusiasm, adversely affect production and, of course, will not bring benefits to the state and the collective. Therefore, only by proceeding from the fundamental principle of giving equal consideration to the interests of the state, the collective and the individual, can we ensure the implementation and fulfillment of contracts.

We must also note that contracts have legal strength and therefore must be observed. Once a contract is signed, both parties must execute it and be bound by law. Whichever party arbitrarily revises or tears up a contract proves that it has a poor sense of the legal system and, therefore, must be called to account according to the law. Hence, in the course of consolidating and improving the contract system, we should continuously enhance the people's concept of policies, of the masses and of the legal system and attend to this work, which affects the whole situation, so as to vigorously promote the rural economy.

CSO: 4007/134

BRIEFS

WHEAT IRRIGATION--Thanks to introduction of the contracting system in using motor-driven wells, Jirem League, Nei Monggol region, has done a good job in combating droughts and irrigating wheatfields. As of late March, some 1.1 million mu of wheatfields were irrigated, an increase of 120 percent over the corresponding 1982 period. [Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 4 Apr 83 SK]

CSO: 4007/134

MEETING TO SPEED UP RURAL REFORM HELD

HK140729 Yingchuan NINGXIA RIBAO in Chinese 2 Apr 83 p 1

[Report: "Ningxia Regional People's Government Holds Telephone Conference To Make Arrangements For the Reform of Rural Supply and Marketing Cooperatives"]

[Text] On the afternoon of 31 March, the autonomous regional people's government held a telephone conference to make further arrangements for the reform of rural supply and marketing cooperatives. The conference called for speeding up the reform and continuously developing its contents.

At the telephone conference, a responsible comrade of the autonomous regional commerce bureau disclosed that since February this year, the region has carried out a pilot project of reforming the system of supply and marketing cooperatives in Zhongwei, Helan and Lingwu counties. Due to efforts made by various departments and their support, grassroots supply and marketing cooperatives in some cities and counties have entered into various joint ventures with specialized households and key households to promote the system of contracted responsibilities in business operation. Initial achievements have been made in the pilot project and many peasants have voluntarily bought shares in supply and marketing cooperatives.

He said that in order to completely reform the region's system of rural supply and marketing cooperatives, leading comrades of these cooperatives in all prefectures, cities and counties must seriously raise their understanding of the importance of the reform, seriously carry out the spirit of the central leadership on the reform of the commercial system and actively and consciously stand in the forefront of the reform. He continued that in reforming the system of rural supply and marketing cooperatives, we must first speed up the reform and then further develop its contents. We must pay attention to the study of gradually changing supply and marketing cooperatives into comprehensive service centers, and to stimulating commodity production and creating more business through the integration of production and marketing. This year, enterprises subordinated to supply and marketing cooperatives must implement and perfect the system of contracted responsibilities in their operations. Cooperatives should be organized so as to serve the masses. It is also necessary to restore and strengthen democratic management and flexible business operation in supply and marketing cooperatives.

At the telephone conference, after talking about the great significance of reforming the system of rural supply and marketing cooperatives, Yang Huiyun, responsible comrade of the autonomous regional people's government, said that as rural commodity production is now rapidly developing and the scale of commodity exchange is expanding with each passing day, it is imperative to reform the circulation system of commodities in rural areas. Failure to carry out the reform will seriously hamper the further development of commodity economy in rural areas. Therefore, we must grasp the reform of the system of supply and marketing cooperatives in all the region's prefectures, cities and counties as an important part of the reform of the whole economic system.

She said that under the new situation of the development of rural economy, all departments must have a sense of urgency and of being hard-pressed. They must brace up, further emancipate their minds, firmly grasp the reform and seriously carry out the work. She stressed that in reforming the system of supply and marketing cooperatives, we must adhere to the socialist road and safeguard the unified socialist market; we must adhere to the principle of relying mainly on planned economy and treating market regulation as an auxiliary, and enliven the market on the premise of guaranteeing the fulfillment of the state's unified plan; we must adhere to the leading position of state-run commerce and implement the commodity circulation system of "three more and one less;" we must protect the interests of customers and refrain from shifting responsibilities onto the masses.

CSO: 4007/134

PEASANTS TO RECLAIM UNDEVELOPED LAND

OW221355 Beijing XINHUA Domestic Service in Chinese 1610 GMT 20 Apr 83

[By reporter Ma Yuqi]

[Text] Yinchuan, 20 Apr (XINHUA)--Hei Boli, acting chairman of the Ningxia Hui Autonomous Region's People's Government, announced at the Regional People's Congress this morning that to help people in the southern mountain area free themselves from poverty at an early date, a decision has been made to organize the masses of the communes and brigades in the poor, densely populated and poverty stricken mountain areas to reclaim undeveloped land in the Huanghe Irrigation Area on a voluntary basis.

Hei Boli made this announcement in his government work report to the first session of the Fifth Ningxia Regional People's Congress.

Hei Boli said: Ningxia's southern mountain area has little rain and prolonged dry spells. It suffers from frequent natural disasters. For a long period, production has developed rather slowly, and the people's life has been very difficult. It is one of the poorest areas in our country. The party Central Committee and the State Council provided large amount and all kinds of support and assistance for the development of this area in the past. At the beginning of this year, the State Council even set up a leading group for the development of agriculture in the "three southern" regions ["San Xi" Di Gu--0003 6007 0966 0575], which also covers Ningxia's southern mountain area, and appropriated special funds to help develop the mountain area. To change the backwardness of this area as quickly as possible, the regional people's government has decided to organize, in a well-planned manner, a group of people from those communes and brigades, with poor natural environment and difficult living conditions, to go to the Huanghe Irrigation Area, where conditions are better, to reclaim undeveloped land.

Hei Boli said: There is about 1 million mu of undeveloped land in the Huanghe Irrigation Area for exploitation. People from the southern mountain area will be permitted to indefinitely farm the land once they reclaim it. In addition, they will be exempt from tax and procurement, in light of the farming conditions.

Hei Boli stressed: This is an arduous task. We must plan well after investigation and study, conduct experiments at selected points, work out a set of rules for its management and carry out the work in a well-planned and well-guided manner. At the same time, we must insist on a voluntary basis. At the start, the number of people should not be too large. Able-bodied persons should come first. They can bring their families after settling in.

Hei Boli concluded by asking the cadres and masses in the relevant communes and brigades in the Huanghe Irrigation Area to proceed from the interest of the general situation, warmly welcome and actively support the masses from the mountain and create conditions and make it convenient for them to reclaim the undeveloped land.

CSO: 4007/134

## QINGHAI

### BRIEFS

**NONSTAPLE FOOD CONSUMPTION**--Nonstaple food consumption has shown a great rise among the urban and rural people of Qinghai. According to statistics, last year the province's pork production reached 44.38 billion jin, an increase of 7.82 million jin over the previous year. Output of beef and mutton increased over 1981 despite natural disasters. Cow and goat milk production reached 261.65 million jin, a rise of 4.8 percent. Production of eggs, vegetables and other items also showed big rises. [Xining Qinghai Provincial Service in Mandarin 1100 GMT 15 Apr 83 HK]

CSO: 4307/134



## FURTHER ADVANCES REPORTED IN LIVESTOCK FEED INDUSTRY

## Joint Efforts

Jinan DAZHONG RIBAO in Chinese 12 Mar 83 p 2

[Article: "All Departments Concerned Work With Each Other in Developing Livestock Feed Industry for Energetic Support to Development of Livestock Industry Production by the Broad Masses of Peasants"]

[Text] By way of supporting the broad masses of peasants in vigorous development of the livestock and poultry breeding industry, the province's agriculture, animal husbandry, and grain departments are working together at individual sites and over broad areas for development of the livestock feed industry. At the present time, 49 counties and municipalities in the province, and some brigades and communes having requisite conditions have already established 63 blended (or mixed) livestock feed processing plants, and are in process of setting up 18 more. Just in the 30 plants that food departments have built, regular annual production amounts to 66,000 tons.

Shandong Province's livestock feed industry has gradually developed from a 1980 pilot project. Development has been most rapid in Yantai Prefecture where 16 plants have been built in 16 of the prefecture's counties and municipalities for the production of 5 million jin of blended livestock feed annually. In order to assure a complete nutritional content of its livestock feeds, this prefecture has also made use of local resources, building a fish meal plant, a bone meal plant, and a plant for producing grit from shells. A look at the use of blended livestock feed for the feeding of livestock and poultry in some places shows remarkable results have been obtained. Formerly the Boqu Brigade hog farm in Guangong Commune, Huang County used a single livestock feed that required 4.3 jin of feed for every jin of weight gain. After switching to the use of blended feed to raise hogs, only 3.42 jin of feed was required for every jin of weight gain, a 25 percent decrease. The fattening period was also shortened from 9 months to 5 months. All the chicken farms in Ye County now feed mixed feeds to eating chickens, and the former raising period of about 100 days has been shortened to about 85 days. Chickens

weigh 4.5 jin, and the feed to meat ratio is 3:1. Departments concerned in Zou County have calculated that by promoting use of blended feeds for the raising of hogs, it would be possible to increase by 70,000 annually the number of hogs removed from inventory, for peasants to increase their incomes by more than 9.8 million yuan, and to save more than 40 million jin of grain. This county began during the last half of 1982 the vigorous promotion of blended feed to raise hogs, which the peasants welcomed. Everyone reported that blended feeds were good. The hogs gained weight quickly and were sent to slaughter early for a saving of both grain and grass. This year the province's livestock feed industry will enter a new stage of development. Right now, all departments concerned are working on plans and taking action in an effort to build more livestock feed processing plants this year in order to change as quickly as possible the situation wherein the province's livestock feed processing does not meet needs for development of the livestock and poultry breeding industry.

#### Editorial Urges Attention to Livestock

Jinan DAZHONG RIBAO in Chinese 12 Mar 83 p 2

[Article by Commentator: "Need For Strong Attention to Livestock Industry"]

[Text] The livestock feed industry is an emerging industry for development of material resources and promotion of livestock industry production. It is the foundation for expansion of the livestock industry. A look at practice within China and abroad shows that in development of a livestock feed industry, scientific formulation to produce feeds that are nutritionally complete or fairly complete for use in feeding livestock and poultry not only permits shortening of feeding periods and increase in production of meat and eggs, but also saves grain, saves energy, lowers costs, and increases effectiveness. Experiments conducted in numerous units in Shandong Province have demonstrated that when blended livestock feeds have been used to raise hogs, both the fattening period and feed costs have been reduced by one-third, and about a 25 percent saving of concentrated livestock has been realized as well. This holds important significance in advancing development of the livestock industry and in bringing about a benevolent cycle in agricultural production.

Much has been achieved in just 3 years between the development of livestock feed industry pilot projects in Shandong Province and the present time. But development has been very uneven. Except for Yantai Prefecture, elsewhere progress in building a livestock feed industry has been fairly slow. In some places,

leaders have not devoted sufficient serious attention to development of livestock feed industries. This state of affairs is not in keeping with the new burgeoning development of the livestock and poultry breeding industry throughout the province. Today peasants in many places in the province, and particularly the large numbers of specialized peasant households and key peasant households that are raising large quantities of livestock and poultry, need feed in quantities such that individual households cannot themselves provide. Frequently they become anxious or worried about the lack of livestock fodder. This problem should arouse a high degree of serious attention on the part of party and government leaders at all levels. They should take effective action and take firmly in hand the building of livestock feed industries.

Shandong Province has broad prospects and abundant resources for development of a livestock feed industry. Rough calculations show that the province could annually provide a livestock feed industry with 2 billion jin of peanut and cottonseed cake residues. This would be in addition to the feed grain that the peasants annually use for the feeding of livestock and poultry, the feed grain that the state provides and makes available through award sales, as well as byproducts from food departments' processing of grain. Concentrated livestock feed resources for the province as a whole annually total as much as 10 billion jin. Were all of this concentrated livestock feed to be processed into blended feeds, figuring a minimum 20 percent increase in utilization rate, more than 2 billion jin of feed grain could be saved. In addition, Shandong province has large mountain and hill areas that contain vast sources of green feed. Along the seacoast and along lakes, aquatic product resources are also abundant, and in cities there are all sorts of scraps and leftovers in food processing industries. All these are a material basis for development of a livestock feed industry. Furthermore, livestock feed resources are not being used scientifically at the present time. Specifically, and annual several billion jin of cottonseed cake residues in the province are not being properly used. Formerly a vast majority has been used directly as fertilizer, and this is a very great waste of resources.

In the process of developing a livestock feed industry, the raising of livestock in widely scattered rural villages and the need for a large amount of fodder must be taken into account. A diversified program that concentrates resources for joint operation must be followed for the industry's simultaneous develop-

ment in cities and the countryside, and for its all around development by state owned enterprises, collectives, and specialized households. It is necessary to proceed from realities in the building of livestock feed plants. The pattern of their distribution must be rational; general methods must be adapted to specific situations; and there must be a mix of large, medium, and small plants, with medium and small ones predominating. In this way, not only can transportation links be reduced and supply be made convenient, but also the goals of small investment, quick results, and high effectiveness can be attained.

Development of a livestock feed industry has very broad ramifications. Not only is it a matter for the agricultural, grain, and animal husbandry sector, but it is also a matter of concern to the scientific research, machinery, light industry, chemical industry, and supply and marketing sectors. All sectors concerned should coordinate closely and work in concert to solve problems involved in livestock feed formulation, quality, inspection, and the supply of raw materials and equipment. In short, if each and every trade and industry starts with the overall situation in mind, thinks about a common strategic objective, and acts positively, building of the province's livestock feed industry can develop very rapidly.

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CSO: 4007/104

## BRIEFS

LIVESTOCK FEED ADVANCES--Last year the province's grain departments made new advances in the processing and supply of livestock feed. The province processed a total of 293 million jin of mixed, compound, and protein feeds. This was 128 million jin more than in 1981. Included was 87 million jin processed in Tangshan Prefecture, one-third of the province's total. Amounts processed in Langfang, Shijiazhuang, and Chengde prefectures increased many times over. The province provided a total of 337 million jin of various kinds of livestock and poultry feed to cities and rural areas of the province, 58 percent more than in 1981. This played a very fine role in supporting development of the livestock and poultry breeding industry. At the same time, the country realized a profit of more than 3 million yuan, the total of profits for the previous 3 years. [Text] [Jinan DAZHONG RIBAO in Chinese 9 Mar 83 p 2] 9432

SHANDONG PREFECTURE COTTON, GRAIN--In 1982, Liaocheng Prefecture of Shandong Province sold 4.46 million dan of ginned cotton to the state as opposed to 650,000 dan in 1978. The per capita amount increased from 16 jin to some 110 jin. In 1978 the prefecture consumed more than 100 million jin of state grain while in 1982 it sold 550 million jin of grain to the state. [Jinan Shandong Provincial Service in Mandarin 2300 GMT 12 Apr 83 SK]

CSO: 4007/134

USE OF PLASTIC MULCH EXTENDED TO COTTON GROWING

Taiyuan SHANXI RIBAO in Chinese 10 Mar 83 p 1

[Article: "Provincial Agricultural, Industrial, and Commercial Departments Make Concerted Effort to Support Agricultural Production By Supplying Plastic Mulch for 1 Million Mu of Cotton"]

[Text] Editor's Note: Agricultural, industrial and commercial departments concerned have made concerted efforts and have prepared diligently for the spread throughout Shanxi Province of new techniques for using plastic mulch in the growing of cotton. This year supplies of plastic mulch are fairly ample, and all cotton growing areas should strengthen leadership, act at the right time, and do a conscientious job of both promoting this new technique and supplying plastic mulch to make sure that plastic mulch is used in production and not allowed to accumulate in warehouses.

By the end of February, before cotton had been sown, Shanxi Province's industrial and commercial departments had already transported promptly to each and every cotton growing region more than 5,000 of the 8,000 tons of plastic ground mulch to be supplied this year for promotion of the new technique of using plastic mulch in the growing of 1 million mu of cotton. They will be largely able to make deliveries in time for the farming season and to supply sufficient amounts.

Use of plastic ground mulch for the growing of cotton is a new intensive farming technique that produces increased yields and substantial economic benefits. Shanxi Province began to use this new technique in 1975, and has conducted experiments, given demonstrations, and promoted its use for 4 consecutive years in different cotton growing areas, on different kinds of soil, and under different natural conditions, achieving remarkable results in tremendously increased yields and earnings. As a result of experiments and demonstrations, an increasingly large number of



cadres and cotton growing peasants in cotton growing areas have come to understand and accept these new techniques. As a result, the number of experimental sites has consistently increased year after year, and the area to which the techniques have been spread has become larger and larger. Back in 1979 when such sites first began, the province's experimental area totaled only 5 mu, and ginned cotton yields averaged 130 jin per mu. By last year, 39 cotton growing counties (and municipalities) throughout the province had applied these new techniques, and the cottonfield experimental and promotional area had rapidly expanded to 150,000 mu. Ginned cotton yields from wetlands and drylands averaged 142.8 jin per mu, a 40 to 70 jin per mu, or 30 to 90 percent increase over cottonfields having otherwise virtually identical conditions that did not use plastic mulch.

In order to hasten expansion of cotton production in the province, and in accordance with plans for each and every cotton growing county (and municipality) to spread further the use of this new technique, the Provincial CPC Committee decided that plastic mulch would be used on 1 million mu of cottonfields throughout the province this year, and that the spread of this new technique would be given attention as a major action for changing the province's low cotton yields. Figuring an average 110 jin per mu of ginned cotton from this 1 million mu of cottonfields, output could amount to 110 million jin. In addition, yields of ginned cotton from 260,000 mu of cottonfields that do not use plastic mulch are expected to average 50 jin per mu for an output totaling 113 million jin. When the two outputs are taken together, the province's total cotton output this year will reach 240 million jin. Thus, though the area planted to cotton this year will be 1 million mu less than the all-time high, total cotton output will be greater than the 230 million jin all time record.

Plans set by the Provincial CPC Committee to spread use of new plastic mulching techniques to large cottonfield areas have encouraged and stimulated all trades and industries to provide vigorous support to scientific farming, and has brought about new enthusiasm for cotton production in the province. The Provincial Second Bureau of Light Industry, the Provincial Department of Agriculture, and the Provincial Supply and Marketing Cooperative have jointly sent out timely notices on production, distribution and state purchase plans for plastic film used in agriculture for 1983. Ground mulch production quotas and raw materials supply have already been set under the centralized leadership of the Provincial CPC Committee and with the energetic support and cooperation of units concerned. Industry and commerce, and agriculture and commerce have dovetailed production, supply, and marketing plans. More than 10 plastic plants in the Second Bureau of Light Industry system have been designated to produce ground

mulch. In order to assure fulfillment of their ground mulch production quotas by the end of March, both as to quantity and quality, they have given priority to ground mulch production and dedicated specific raw materials for this use. They are also striving to improve toughness and resistance to aging of the material to set the stage for its use in plastic mulch laying machinery. Agricultural means of production companies responsible for procurement and supply of plastic mulch will procure, transport and supply the mulch, making sure it reaches users on time for the farming season and in sufficient quantities. Ground mulch that workers have made special efforts to produce will be moved smoothly and without impediment to cotton growing areas and placed in the hands of cotton growing peasants. Peasants in Xiangfen County, who got an early start, had already purchased 360 tons of ground mulch by the end of February.

9432

CSO:4006/103



## STABILITY IN HOUSEHOLD CONTRACT SYSTEMS URGED

SK201158 Taiyuan SHANXI RIBAO in Chinese 17 Mar 83 p 1

[Text] According to our reporter Li Pingshe, household contracting systems represent a new phenomenon stemming from the development of socialism in rural areas across the country and have great vitality. By no means should these systems be regarded as a "low-level form" or an "expedient measure" and be changed or raised to a higher level in a rush manner. Efforts should be made to continuously improve them and maintain their long-term stability. This was the common viewpoint of the recent provincial seminar on the agricultural economy.

At the seminar, representatives contended: the establishment of household contracting systems is aimed at readjusting the relations of production and also represents the new relations of production after the readjustment. These relations are in conformity with the development of productive forces and have relative stability, and, therefore, cannot be changed unceasingly. We must draw a lesson from the extremely rapid changes of the past in production relations. As long as peasants are allowed to concentrate their endeavors on, and to invest in, contracted farmland, we should sign long-term contracts with households rather than 1-year, 2-year or 3-year contracts. The long standing of the household and collective economy decides the long-term existence of household contracting systems. Only by maintaining stability among household contracting systems can we stabilize the production enthusiasm of peasants and accelerate production development.

In stabilizing household contracting systems, it is first necessary to confer the long-term right of utilizing farmland to peasants. At the seminar, representatives stated: farmland is a basic means of production. As long as the contracting of farmlands is stabilized, it means that we have stabilized the key task of enacting household contracting systems. Farmland has a character different from other means of production. As long as farmland is under good management, it will never become useless or decrease in value. On the contrary, its value will become greater and greater. Signing an extremely short term contract for farmland and conducting unceasing changes in systems will not favor the work on farmlands, will lead to predatory production and will destroy the resources of farmlands. Representatives contended that, to ensure stability among household contracting systems, we should issue certificates of land utilization as we did for the right of managing forests, sign long-term contracts as much as possible and renew short-term farmland contracts that have expired.

In analyzing factors affecting the stability of household contracting systems, representatives contended that a good job should be done in fulfilling the following four tasks: 1) it is necessary to continue conducting criticism against the extreme "leftist" line so as to correct the erroneous understanding which regards household contracting systems as "individual farming" and a "low-level form" and regards any collective as a high-level form of transition. Efforts should be made to enable the broad masses of cadres and the people to know that with "the two kinds of contracted households" and new collectives, there is no distinction between low and high level forms and that they are outcomes of enacting household contracting systems. Therefore, in stabilizing household contracting systems, we should uphold the principle of respecting the people's will, act according to the development of production and to the natural law of things and refrain from adopting political and administrative measures in order to forcibly popularize the systems and to raise them to a higher level arbitrarily; 2) leadership at all levels should refrain from offering new ideas arbitrarily and seeking new styles. They should proceed from the overall position of stabilizing household contracting systems while guiding production so as to get rid of the people's fear of changes; 3) a good job should be done in getting well prepared for renewing contracts that have expired. In making preparations, we should not readjust contracted plots in a big way and should not increase the base of contracts. It is necessary to readjust contracted plots in line with the principle of "keeping the majority of contracted farmlands untouched and readjusting them a little" and to improve the imbalance caused by the changes of population and labor forces among contracted households by readjusting their state assignments. As for farmland that must be readjusted, it is necessary to allow commune members involved in contracted farmland to draw extra profits in order to recover their investment; and 4) if production teams are disbanded while conducting commune and team structural reforms in rural areas, the responsibility, right and profits of contracts signed with households should be shifted to the brigade authorities and the authorities of newly-built economic organizations. In conducting reforms, it is necessary to inform cadres and the masses that systematic transformation does not mean the disintegration of the collective economy. The newly-built organizations of collective economy are still responsible for maintaining the contracting relationship with households.

## TOWNSHIP REPLACES COMMUNE IN CHENGDU COUNTY

HK090617 Xian Shaanxi Provincial Service in Mandarin 1130 GMT 8 Apr 83

[Text] According to SHAANXI RIBAO, (Liulin) Commune in Chengdu County has now been replaced by a newly-established township government. (Liulin) Commune is a pilot project unit of the Hanzhong Prefectural and Chengdu County CPC Committees for reform of the commune system. After the reform started at the end of February, they studied the experiences of other places in accordance with the spirit of relevant central documents. After more than 1 month of investigation and study, on the basis of doing a good job in ideological work for the cadres and masses, they set up a township CPC committee, government, and agriculture-industry-commerce joint company, to replace the commune setup.

The new township CPC committee concentrates on tackling the implementation of the party's line, principles and policies and on ideological and organizational building. The township government is mainly responsible for implementing the policies and decrees of the state and the upper-level government and working with the township people's congress. It checks on, guides and supervises the plans and major measures in economic construction, and also carries out the necessary administrative intervention. It promotes the building of the township. The agriculture-industry-commerce joint company exercises economic functions in all links of production, exchange, payments and distribution in the whole township. Its main tasks are to lead its four branch companies: agriculture, industry, supply and marketing services for production, and commerce. It also leads each economic unit, specialized household and household doing specialized jobs in doing business and fulfilling the economic plans transmitted from the upper levels.

There are altogether seven persons in the new party, government and enterprise leadership groups, nine fewer than in the former commune party and government leadership groups. Their average age is 41.3. All of them have educational standards at and above junior secondary level. (Chen Hualin), 39, is deputy chairman of the township government and manager of the joint company. He was formerly [words indistinct].

CS0: 4007/134

# EARLY START MADE ON SPRING FARMING IN YANBEI PREFECTURE

Taiyuan SHANXI RIBAO in Chinese 7 Mar 83 p 1

[Article: Spring Farming Preparations Underway Early in Yanbei Rural Villages. Production Responsibility System Stable; Peasant Zeal for Production High"]

[Text] A new situation has taken place in spring farming preparations in Yanbei Prefecture. The correspondent learned the following from the Prefecture Agricultural Committee in late February. Right now more than 500,000 peasants and more than 100,000 pieces of farm equipment are in readiness for spring farming. Barnyard manure and chemical fertilizer are 3 percent and 12 percent more plentiful than for the same period last year. The prefecture has more than 6,000 irrigation wells in operation, and a total of more than 656,000 mu of land was planted last winter and this spring, 50 percent more than during the same period last year. More than 1.3 million mu of land have been rolled, compacted, harrowed and raked. This is 30 percent more than last year. Sixty-seven thousand seven hundred sixty medium size and small farm implements have been bought, and more than 145,000 farm machines have been repaired. Commune members have personally purchased 1,938 tractors and 238 trucks. The 110 million seeds the prefecture needs to plant its crops have all been made ready, more than 70 percent of them superior varieties. Farm science and technology workers from all levels have gone into rural villages, and all sorts of farm technology contract agreements and scientific farming practices are in process of being put in place. More than 3,000 county and commune cadres have gone into the front lines of spring farming and production. The foot of the Great Wall and embankments along the Sanggan River are bustling with spring activity.

In this years farming preparations, all jurisdictions have elevated agricultural reliance on science to a higher position. They have acted early to reorganize and to establish and perfect rural science and technology, science popularization organizations, and science and technology service centers. They have done planning, worked out actions to be taken, taken a grip on

training, subscribed to scientific and technical journals, printed scientific and technical materials, assigned quotas, and clarified responsibilities. Throughout the prefecture, 1739 agricultural science and technology personnel and more than 5,000 peasant technical personnel have signed technical contract agreements for single or multiple kinds of crops with 400,000 peasants households. This is 120,000 households more than last year. For major crops such as potatoes, corn, millet, wheat, naked oats and oil-bearing crops, use of superior varieties has spread. The areas to which the use of pesticides has spread, to which compound nitrogenous and phosphate fertilizer has been applied, and on which plastic ground mulch is used have all more than doubled over last year.

9432

CSO:4007/103

## SHANXI

### BRIEFS

SHANXI AFFORESTATION--In 1982, Shanxi Province scored achievements in afforestation. Last spring, more than 10 million people from all professions and trades had participated in tree-planting activities on a voluntary basis. They planted some 64 million trees, including the trees planted in line with plans, the province afforested 3.5 million mu of land and planted 270 million trees. [Taiyuan SHANXI RIBAO in Chinese 13 Mar 83 p 1 SK]

CSU: 4007/134

## ACTION TO PROTECT SPECIALIZED HOUSEHOLDS

HK090509 Chengdu Sichuan Provincial Service in Mandarin 2300 GMT 8 Apr 83

[Text] The Neijiang Prefectural CPC Committee and commissioner's office recently issued a decision resolutely banning violations of the economic interests of specialized households and households doing specialized jobs and protecting their legitimate rights, so that they can get rich through hard work with minds at ease and lead the peasants to develop production and accomplish common prosperity. The decision made the following points:

1. We must create public opinion and atmosphere for honor of getting rich through hard work.
2. We must teach the cadres and masses that impositions and extortions may not be pressed under any pretext on specialized households and households doing specialized jobs.
3. The tax revenue departments must act according to the tax laws and may not arbitrarily expand the tax collection scope. Economic contracts signed by communes and brigades and departments concerned with specialized households and households doing specialized jobs may not be arbitrarily terminated or torn up. It is necessary to handle administratively and exact economic compensation in cases of damaging their production and interests. Legal sanctions will be taken in serious cases that violate the law.
4. It is necessary to deal resolute blows at criminal elements who blackmail, threaten and steal from specialized households and households doing specialized jobs.
5. We must pay attention to lightening the social burdens of these households. We should not organize them to take part in excessive social activities.

This decision was implemented at a meeting of county and city CPC committee secretaries and responsible comrades of departments concerned held in late March. It is now being put into effect.

CSO: 4007/134



'XINHUA' NEWSLETTER DESCRIBES LIANGSHAN PROSPERITY

OW211259 Beijing XINHUA Domestic Service in Chinese 0011 GMT 21 Apr 83

[Newsletter by XINHUA reporter Song He: "The Gold and Silver Policy Enriches Liangshan"]

[Excerpts] Chengdu, 21 Apr (XINHUA)--In the greater and lesser Liangshan areas, Sichuan Province, where the people of Yi nationality live in compact communities, more well-to-do Yi nationality households with an annual income of 5,000 yuan and possessing over 100 draft animals are emerging in numbers. These Yi households who know how to manage and work to achieve prosperity have become the targets of emulation by the local people and have been praised as "the swallows that brought spring to Liangshuan."

The Liangshan Yi Nationality Autonomous Prefecture with a population of over 1.3 million is the largest area in our country inhabited by the people of Yi nationality.

After the party's third plenary session, the party relaxed the rural economic policy and took extra care of the national minority areas. As a result, the situation for production in Liangshan has also rapidly taken a turn for the better.

Early this year, the system of peasant households assuming full responsibility for most of the farm work was implemented totally in the Liangshan countryside; production teams primarily engaged in forestry and animal husbandry are exempted from grain delivery tasks but the policy to let them sell forest and animal products and to encourage them to sell grain is also applicable to them. The peasants of all nationalities who were greatly inspired by this policy, have warmly praised the party's policy as a "gold and silver policy." They are dedicating their energy and sweat to cultivating the land, the forests and to animal husbandry and sideline production. The autonomous prefecture reaped an extraordinary bumper harvest last year, the total grain output amounted to more than 2.48 billion jin, or an increase of 30.5 percent as compared with that in 1979.

The hilly areas of the Liangshan autonomous prefecture were hit by heavy snowstorms on more than 20 occasions between December last year and March this year and experienced unprecedented low temperatures over a long period, but most of the 700,000 draft animals in the autonomous prefecture survived the severe cold safely.

CSO: 4007/134



## XINJIANG

### BRIEFS

SPRING FARMWORK--Drought has appeared throughout Xinjiang this spring. The rural cadres and peasants have actively fought the drought and promoted spring sowing. At present, the region has planted 3.6 million mu of crops, including 3 million mu of spring wheat. [Urumqi Xinjiang Regional Service in Mandarin 1655 GMT 8 Apr 83 HK]

CSO: 4007/134

## XIZANG

### BRIEFS

RURAL INCOMES--According to the departments concerned, average incomes of peasants and herdsmen in Xizang last year exceeded 220 yuan. Statistics show that average per-capita collective distribution was 47.5 percent higher than in 1979, while income from domestic sideline production rose by 168 percent. The average burden of cadre subsidies per person was 2.8 yuan, 50 percent less than in 1979. [HK200824 Lhasa Xizang Regional Service in Mandarin 0000 GMT 20 Apr 83]

CSO: 4007/134

YUNNAN

BRIEFS

YUNNAN PIGS--Yunnan Province procured 965,000 porkers in the first quarter of the year, an increase of 28 percent over the same period last year and a record. [Kunming Yunnan Provincial Service in Mandarin 1100 GMT 12 Apr 83 HK]

CSO: 4007/134

## Development

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TITLE: "Investigation of the Target and Approach of Agricultural Development in the Suzhou Area"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese No 6, 20 Dec 82 pp 73-78

TEXT OF ENGLISH ABSTRACT: The Suzhou area is the main part composing the Taihu Valley. This area is rich in natural resources and has been fairly well utilized. Intensive farming prevails there, and its economical, technological and cultural levels are pretty high. For years it has contributed much to the development of agricultural production in China.

In order to further utilize and develop the area's superiority in natural resources and labor power as well as economical technology, we must from now on firmly follow the path of steadily increasing the crop production, overall developing agriculture, forestry, animal husbandry, sideline production and fisheries, combining agricultural production with sideline undertakings,

[Continuation of ZHONGGUO NONGYE KEXUE No 6, 20 Dec 82 pp 73-78]

industry and commerce. It is necessary also to create a good and rational ecological environment of high efficiency, organize production with the intensive labor force and techniques, and establish commodity production bases for diverse products and for foreign trade. The aim of all these will be to raise the ecological and economical effects and labor productivity, speed up the development of agriculture, thus improving the people's living standard and rendering new contributions to China.

To push the agricultural economy of the Suzhou area to a new level, we must persist in adopting the multiple production responsibility systems established in the rural areas, carrying out seriously the policy of relying principally on biological technological measures without neglecting engineering and mechanical measures in agricultural production. In addition, we should pay attention to the problem of integrated development of urban and rural economy, make necessary reforms and open a new approach to the modernization of our socialist agriculture.

9117

CSU: 4011/43

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TITLE: "The Utilization and Transformation of the North China Plain"

SOURCE: Beijing DILI YANJIU [GEOGRAPHICAL RESEARCH] in Chinese No 1, 1983  
pp 1-11

TEXT OF ENGLISH ABSTRACT: The North China Plain occupies an important position in the country. However, the natural hazards of drought, flood, salinization-alkalization as well as wind frequently take place over a long period of time. In addition, there are more than 100 million mu of low-yield land, hence agricultural production is unstable and not high and it is impossible for the living standard of the local people to rise rapidly. If that which is beneficial is promoted and that which is harmful is avoided and superiority is given full play, great production potential can be tapped. Therefore, it is possible to build the region gradually into an important base for commodity grain, cotton, oil-bearing crops, soybean and fruits as well as an integrated agricultural region. Favorable conditions for decision making are as follows: land resource, heat and temperature conditions as well as manpower in the region are sufficient, flourishing industry and developed urban areas and transportation are favorable for agricultural development; in a certain sense, it has a solid foundation

[Continuation of DILI YANJIU No 1, 1983 pp 1-11]

for production due to the long history of agricultural development; and some achievements and experience have been obtained by the state in development, utilization and management of the region.

The strategic thinking about the management and transformation of the North China Plain should be: under the unified leadership, draw an overall plan to undertake integrated management; cope with more difficult points after the easy ones have been tackled; carry out work in units and areas in a combined way; persist in realizing the goal for a long time to come; and finally, stress practical results. As for conquering natural disasters, problems should be solved in the order of flood drainage--salt control--drought resistance--fertility fosterage so as to improve natural ecological environment step by step. Meanwhile, an agricultural production structural system should be established accordingly. In order to ensure fundamentally the realization of the objective of disaster elimination and production increase from a long-term point of view, water transfer from south to north, the regulation of the three major rivers (the Huanghe, Huaihe and Haihe) as well as soil conservation in the upper reaches are all principal measures related to the development of agricultural production of the North China Plain.

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TITLE: "A Study of Regionalization of Cotton Cultivation in China"

SOURCE: Beijing DILI YANJIU [GEOGRAPHICAL RESEARCH] in Chinese No 1, 1983  
pp 11-22

TEXT OF ENGLISH ABSTRACT: A scientific division of China's cotton cultivated area is favorable for the country's cotton production in accordance with the principle of adopting suitable measures to local conditions, practicing reasonable allocation and guiding production according to various types.

According to ecological and economic conditions, basic characteristics of cotton production and the current state of allocation, China's cotton cultivated area can be divided into five major cotton regions and 12 cotton subregions. They are: 1) the Huanghe Valley cotton region (including four subregions: North China Plain, Huang-Huai Plain, Fen-Wei-Luo Plain and Beijing-Tianjin-Tangshan area); 2) the Changjiang Valley cotton region (including five subregions: the Lower Changjiang Valley, the Middle Changjiang Valley, the Upper Changjiang

[Continuation of DILI YANJIU No 1, 1983 pp 12-22]

Valley, the Nanyang-Xiangyang basin, and the southern red earth hilly area); 3) the Northwestern Interior cotton region (including three subregions: south Xinjiang, east Xinjiang and north Xinjiang-Hexi corridor); 4) the early-maturing cotton region; and 5) South China cotton region.

The North China Plain is a famous cotton area of China, possessing the optimum ecological conditions suitable for cotton cultivation with great potential for increasing production. South Xinjiang and the Huang-Huai Plain are also cotton-producing areas known for their optimum ecological conditions, but the current status of cotton development is handicapped by the relatively low level of economic and technical conditions. They do, however, have great potential. The Lower and Middle Changjiang Valley Plain is a large high-yield cotton-cultivated area distributed intensively with cotton fields. It is suitable for cotton cultivation, but has limited potential for development. The Fen-Wei-Luo Plain, north Xinjiang and Nanyang-Xiangyang Basin are also main cotton production areas, but have less potential. The Upper Changjiang Valley, southern red earth hilly area, south China and northern early-maturing cotton regions are ecologically less suitable for cotton production: cotton fields there are small in acreage and distributed separately. From the strategic point of view of allocation, the future development of China's cotton-producing areas should take into account the following measures: consolidating and improving cotton concentrated

[Continuation of DILI YANJIU No 1, 1983 pp 12-22]

areas of the Lower and Middle Changjiang Valley regions, actively constructing the cotton producing area of the North China Plain, gradually developing the new cotton area of the Huang-Huai Plain, creating conditions to explore the high-quality cotton area in south Xinjiang, adjusting and diminishing cotton acreage of the regions where cotton cultivation is ecologically unfavorable and concentrating properly, dispersing and distributing cotton acreage so as to establish a rational allocation system of cotton development.

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TITLE: "Determination of the Main Source of the Changjiang River"

SOURCE: Beijing DILI YANJIU [GEOGRAPHICAL RESEARCH] in Chinese No 1, 1983  
pp 14-16

TEXT OF ENGLISH ABSTRACT: Usually a river has several headwaters as its source, but the definition of the main source of a river lacks a universally accepted principle or criterion. Some rivers' main sources are defined according to their lengths, while others are defined according to the traditional habit of the people. Under normal conditions, the traditional habit of the people coincides with the general flow direction of the river course, i.e., if we make a survey from the plan map of a river network it looks like a natural extension from lower reaches to upper reaches. However, the quantity of water in a river usually does not define the main source.

The source region of the Changjiang River headwaters is situated in the hinterland of the Qinchai-Aizang Plateau, which is an untraveled region, so that a consensus of opinion about where the main source of the Changjiang River rises has not yet been attained. After thorough investigation among the various headwaters of the Changjiang River, the Tuotuohe River is the longest (including the glacier on the

[Continuation of DILI YANJIU No 1, 1983 pp 23-34]

headwaters), with the Dangqu River being slightly shorter. As for the criterion of unanimous direction of streams, the Garqu River is the smoothest with the Tuotuohe River next; by the discharge of water, the Dangqu River ranks the largest with the Tuotuohe River second. Summing up the above considerations, the Tuotuohe River is the longest with approximately the same direction of streams. For this reason, we consider the Tuotuohe River to be the main source of the Changjiang River.

In accordance with the above standpoints, we have computed the length of the river flowing from the headwaters of the Tuotuohe River to Yibin of Sichuan Province to be 3474 km; and the length of the section from Yibin to the river mouth is about 3806 km. Since the main channel of the Middle and Lower Changjiang rivers sways from bank to bank frequently and the section of the river mouth is extended for a considerable distance to the East China Sea, the length of the Changjiang River is about 6300 km.

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TITLE: "A Preliminary Analysis of the Processes of Sediment Yield in Small Catchments on the Loess Plateau"

SOURCE: [JOURNAL OF GEOGRAPHICAL RESEARCH] in Chinese No 1, 1983 pp 23-34

ABSTRACT: The main regions of sediment yield lie on both sides of the Loess Plateau, from Hengshui to Benmen, and in the upper and middle reaches of the Yellow, Wei, and Xue rivers on the loess plateau. The sediment yield is concentrated during the period from July to September, and in one or two rainstorms. The delivery ratio approaches 1 in the watersheds on the plateau. Sediment yield in a small catchment is the result of both physical factors and human activities. Soil erosion is proportional to the addition of precipitation and the depth of runoff and increases with the gradient of the ground surface, while the runoff flow erosion decreases on the slope of over 25-28°. Clayey loess is present in the southern part of the plateau and coarse loess in the north. Scrub is better for soil conservation than is other vegetation. The sediment yield has been increasing in the last 30 years in the lower reaches of the Huanghe. The artificial increase is about 23-35 percent of the mean transporting sediment.



[Continuation of DILI YANJIU No 1, 1983 pp 35-47]

The pattern and intensity of soil erosion vertically change from top to bottom in the small catchment. Rill erosion dominates in the intergully, and the gully bank is an area of multi-functions of water erosion, gravitational and cavern erosions. The sediment output in the gully bank is about 59 percent higher than that in the gullied-hilly loess region, and most sediment yield from the gully bank is in the loess gullied-table areas.

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TITLE: "The Changes of the Songhua-Liao River System"

JOURNAL: DILI YANJIU [GEOGRAPHICAL RESEARCH] in Chinese No 1, 1983  
pp 42-51

TEXT IN ENGLISH ABSTRACT: Since the Neogene, the ancient Songhua-Liao river system has undergone several changes with the alternation of fluvial and lacustrine formations on a large scale. In the Early Miocene, the ancient Nen-Jiang-west Liao River formed a centripetal interior drainage, and in the Late Miocene, Baian-Dabusu Lake and Panshan-Tienzuang Tai Lake were formed. During the Pliocene, a fluvial and lacustrine climax had reached since Cenozoic time. Subsequently, in the Tai-Kang stage, the hydrographic net [sic] had become centripetal interior drainage once more.

At the end of the Early Pleistocene or the early stage of the Middle Pleistocene, the Songhua River had cut through the divide near the neighborhood of Shanxing, and subsequently the Liao River also cut through the Tieling-Faku Hill. Thus the centripetal interior drainage of the ancient Songhua River and Liao River became the present exterior drainage.

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TITLE: "The Fluctuation of Autumn Rain in Southwest China"

SOURCE: Beijing DILI YANJIU [GEOGRAPHICAL RESEARCH] in Chinese No 1, 1983  
pp 74-84

TEXT OF ENGLISH ABSTRACT: It is found in this paper that the variations of runoff from the hydrometric station at Yichang in the upper reaches of the Changjiang River in September and October reflect the variations of autumn rain in southwest China. Therefore, it is possible to utilize the data of runoff from the period 1882-1980 at Yichang to research the fluctuation of autumn rain in southwest China.

The fluctuations of autumn rain in this region are of a cyclic character: the major cycle in September is one of about 3 years and 17 years, but it is of about 13 years in October. The fluctuations of the autumn rain may be divided into many spells; some of them are above normal, but others are below normal. These spells are related to the conditions of the subtropical ridge in the Pacific in September and with the Indian low in October.

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TITLE: "Impacts of Water Transfer from South to North on the Water Quality of the Huangpu River"

SOURCE: Beijing DILI YANJIU [GEOGRAPHICAL RESEARCH] in Chinese No 1, 1983  
pp 105-118

TEXT OF ENGLISH ABSTRACT: This paper gives a preliminary analysis of the characteristics and variations in regularity of runoff of the Changjiang River in the low-flow period (from December to March) and the effects on the quality of the water of the Huangpu River after the intrusion of sea water.

Although rich in water resource, the Changjiang River does not have much discharge during the low-flow period. The total runoff during the low-flow period occupies only 15 percent of the total annual runoff. The mean monthly discharge during the low-flow period of a normal year of 50 percent frequency is below 15,000 M<sup>3</sup>/sec. The mean monthly discharge of 75 percent frequency of a dry year in January and February is less than 10,000 M<sup>3</sup>/sec. Salinity varies with the quantity of the flow which comes from upstream. It becomes highly sensitive in the river-mouth area when the discharge at Da Tong Station is 10,000 M<sup>3</sup>/sec.

[Continuation of DILI YANJIU No 1, 1983 pp 108-114]

The salinity in the river-mouth area will increase rapidly if the discharge at Da Tong Station is less than 10,000 M<sup>3</sup>/sec. As a result, serious impacts will happen to the water supply of both Shanghai Municipality and the industrial and agricultural bases in the river-mouth area. For the planning of the water supply in the Changjiang River basin, it is necessary to keep the discharge through Da Tong Station above 15,000 M<sup>3</sup>/sec, or at least not less than 10,000 M<sup>3</sup>/sec.

9717

CSO: 4011/37

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ORG: All of the Provincial Cotton Research Institute, Academy of Agricultural Science of Sichuan

TITLE: "A Preliminary Study on the Genetics and Stability of Fusarium wilt Resistance of Cotton"

SOURCE: Tianjin ZHILU BAOHU XUEBAO [ACTA PHYTOPHYLACTICA SINICA] in Chinese No 1, Mar 83 pp 33-38

TEXT OF ENGLISH ABSTRACT: Reciprocal crosses between five strains with wilt resistant and a susceptible cultivar of upland cotton were made. The inheritable effect of wilt-resistance is exhibited in the hybrid  $F_1$  as partial dominance, and tended toward the female parent. The heritability of host-pathogen interaction was not differential in five resistant parents versus five pathogen isolates of three physiological races collected from China. The resistant parents maintained their resistibility for 2 years when grown on lightly infected soils. Results indicated that these sources of wilt-resistance were stable and adaptable. However, the resistibility of hybrids did not differ in the first year, whether they were grown on the lightly infected soils or on the artificially

[Continuation of ZHILU BAOHU XUEBAO No 1, Mar 83 pp 33-38]

inoculated bed. In the second year, the resistibility of their progenies ( $F_2$ ) decreased. Therefore, in the process of wilt-resistant breeding, the  $F_1$  may be grown on the lightly infected soils, but the  $F_2$  must be grown in the artificially inoculated bed for selecting more resistant individuals.

9/11  
CSO 4011/84

AUTHOR: LIN Jingliang [2651 2529 0081]

ORG: Fujian Academy of Agricultural Sciences

TITLE: "Relationships Between the Development of Fertility of the Highly Productive Paddy Soils and Field Ecosystem"

SOURCE: FIZHE FUJIAN NONGXUE YUAN XUEBAO [JOURNAL OF THE FUJIAN ACADEMY OF AGRICULTURAL SCIENCES] in Chinese No 4, Dec 82 pp 1-12

TEXT OF ENGLISH ABSTRACT: 1. Soil is an important component of the field ecosystem and the change of any component of the ecosystem may influence the change of the soil distinctly. On the other hand, the change of the soil can also affect change in the ecosystem. For example, we investigated several high yield fields with more than 1.5 tons (3,000 catties) of annual yield of grain per mu; such yield appears to coincide with the equilibrium of the agricultural ecosystem. 2. The essence of soil fertility is reflected in the component materials, such as water, nutrients, air and heat of the soil. It supplies substance and energy for plant growth. Thus the high fertility or low fertility of the soil depends upon the condition of its constituents and energy. 3. The formation and development of highly productive paddy soils rests on the components of the field ecosystem. It is important to maintain the balance of

(continuation of FUJIAN NONGXUE YUAN XUEBAO No 4, Dec 82 pp 1-12)

inputs and outputs, usually with the inputs exceeding the outputs. We found that the highly productive paddy soils were always formed in the following ways:

(1) Biological fixation was a great source of the nitrogen reserves of the paddy soils.

(2) Soil fertility is built up through increased utilization of the sunlight by the plants.

(3) Water from rainfall and irrigation is well utilized for nitrogen balance.

(4) The residues of the plant bodies or straws is returned and organic nutrients were added to keep the organic matter of paddy soils in balance.

(5) The elements and matter is arranged well in order to maintain the soil fertility.

4. The fertility characteristics of the highly productive paddy soils are:

(1) The synchronous action of a good structural pattern of the soil body to the nature of soil fertility;

(2) A harmonious ratio of potential fertility with available nutrients creates the positive relationship between "supply and demand." A good harmonic pattern may adjust the ratio of inherent potentiality and available nutrients;

(3) The basic fertility is necessary for establishing a sound foundation in nutrient substances;

(4) The content of humic acid and the ratio of humic acid to fulvic acid of the highly productive paddy soils should be high;

(5) Resistance to stress is another characteristic expression of paddy soil fertility.

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5. Although the conditions of the formation for highly productive paddy soils rely heavily on the proper environmental conditions, man's activities still rank first in its morphogenesis. To obtain the best results, the application of tillage, fertilization and flooding should be considered according to the natural development of the soils.

Thus, in maintaining the unity of antagonistic factors between soil humus accumulation to hasten the maturation of soil with flooding, oxidation-reduction process and leaching illuviated process of ferruginous soil, we may create large areas of paddy fields that are suitable for producing stable high yields.

9/17

CSU: 4011/30

AUTHOR: None

1. Fujian Institute Center of Agricultural Sciences

2. "Experience of Three Continuous Seasons of high Yield of weilaimusi (willamson) soybean"

3. Editor: FUJIAN AGRICULTURAL SCIENCE AND TECHNOLOGY [FUJIAN AGRICULTURAL SCIENCE AND TECHNOLOGY]  
in volume 1, no 10, pp 21-23

4. Summary: A 3-year cultivation research with weilaimusi breed of soybean, selected and purified by the center, was carried out in the autumn of 1977. Proper cultivation techniques suitable for that particular breed were gradually mastered through experimentation and observation and the unit yield was improved. From the autumn of 1977 to 1980, an average of 515.8 jin/mu was obtained; from the autumn of 1981, an average of 444.5 jin/mu. In the autumn of 1981, typhoon No. 16 occurred (late Sep) and severe lodging caused a yield loss of 16.9 mu of demonstrative fields remained. The experience of the 3 seasons was summarized as: (1) Select suitable cultivation techniques for both autumn and spring weather conditions of the region; (2) Determine suitable cultivation; (3) Determining suitable planting time in autumn; (4) Change the habit of not applying fertilizer for soybean; (5) Give attention to prevention of diseases (more serious in the spring, and diseases more serious in the autumn). Experience of these techniques is explained in some detail.

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TITLE: "Agricultural Science and Technology Must Serve to Solve the Key Problems of Economical Efficiency in Agricultural Production"

SOURCE: Beijing ZHONGGUO NONGYE [SCIENTIA AGRICULTURA SINICA] in Chinese No 1, 20 Feb 83 pp 1-8

TEXT OF ENGLISH ABSTRACT: Agricultural science and technology must face production and construction, persist in the direction of serving the agricultural production and decide upon a correct technological policy by giving special consideration to the following factors:

1. Due to the huge population and limited scale of arable land in China, the existing arable land must be fully and rationally utilized, the yield per unit area and the quality of the products must be improved, and the imbalance among various regions must be gradually rectified.
2. Crop farming should combine with livestock farming to speed up the development of animal husbandry, and great efforts should be made to increase meat, egg and milk production so that our people's food component can be improved gradually.

[Continuation of ZHONGGUO NONGYE No 1, 20 Feb 83 pp 1-8]

3. The hilly and mountainous areas, pastures and water surfaces should be actively reclaimed to produce a diversity of agricultural products.
4. Lay stress on the exploitation, utilization and protection of natural resources of China in a planned way so as to restore and establish a good ecological system for comprehensive agricultural production.

According to the technological policy mentioned above, a series of major research programs should be set up, including some tackling the important scientific and technological problems in agricultural production; the strategical study of agricultural development in major regions; the study of basic work and theory, etc. In order to accomplish these tasks, first of all the enthusiasm of the broad masses of scientists and technicians must be aroused; second, the structure of agricultural research and extension work must be readjusted; third, a large rank of scientific and technological personnel must be trained; fourth, budget must be augmented to improve the working conditions for research; and fifth, the organization and management of research work must be strengthened.



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TITLE: "Investigation of the Characteristics of Soil Constitution of the Major  
Soils in the Sanjiang Plain, Heilongjiang Province, and a Method of Soil  
Conservation"

SOURCE: Beijing ZHONGGUO NONGYE [SCIENTIA AGRICULTURA SINICA] in Chinese No 1,  
20 Feb 83 pp 54-61

TEXT OF ENGLISH ABSTRACT: A deep profile of the major soils in the Sanjiang  
Plain, Heilongjiang Province, was analyzed to study the characteristics of soil  
constitution, nutrient capacity and hydrological characteristics of soil, and a  
method of soil conservation in this area was worked out.

1. In accordance with the hydrological characteristics of solum, emphasis should  
be placed on the conservancy of waterlogged farmland by drainage, irrigation and  
water storage; trench work should be combined with farming practices for water  
drainage in smolmitza, meadow lessive and gley lessive.

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2. Due to the thin black layer and poor nutrient capacity in lessive soil, it is  
advocated that those lands in which the depth of the black layer is around 20 cm  
be utilized as farmland and a wheat-wheat-soybean rotation system be adopted;  
those with a black layer less than 15 cm in depth be utilized as forest or  
grazing land.

3. The lessive soil may be profitably utilized as paddy field due to the slow  
nutrient consumption and less irrigation needed by rice plants, resulting in a  
200-300 percent higher yield than when rice is grown in upland fields.

AUTHOR: None

ORG: Hubei Provincial Cooperative Group for Long-range Forecast of  
in Wheat

TITLE: "Statistical Model of *Gibberella zeae* Epidemic in Wheat and Methods of  
Long-range Forecast in Hubei Province"

SOURCE: Beijing ZHONGGUO NONGYE [SCIENTIA AGRICULTURA SINICA] in Chinese No 1,  
20 Feb 83 pp 71-77

TEXT OF ENGLISH ABSTRACT: This paper reports the research on the relationship between the epidemics of wheat scab (*Gibberella zeae* Petch) and meteorological factors. It revealed that the epidemic of scab was caused by the interaction of four meteorological factors, including rainfall (R), rain days ( $R_d$ ), relative humidity ( $R_h$ ) and sunlight hours (S), on both the pathogens and the host plants. Hence, a statistical model for calculating the incidence of this disease was established as  $Y' = [\sin(47.72 \lg Q - 33.64)]^2$ , where  $Q = R \cdot R_d \cdot R_h / S$ . It also indicated that the outbreak of scab epidemic varied with the different climatic conditions and atmospheric circulation in different years. According to the statistical relation between the fluctuation of the wheat scab outbreaks and the long-range climatic conditions and atmospheric circulation of the year, the long-range forecast for the whole province or for a specific area can be made.

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